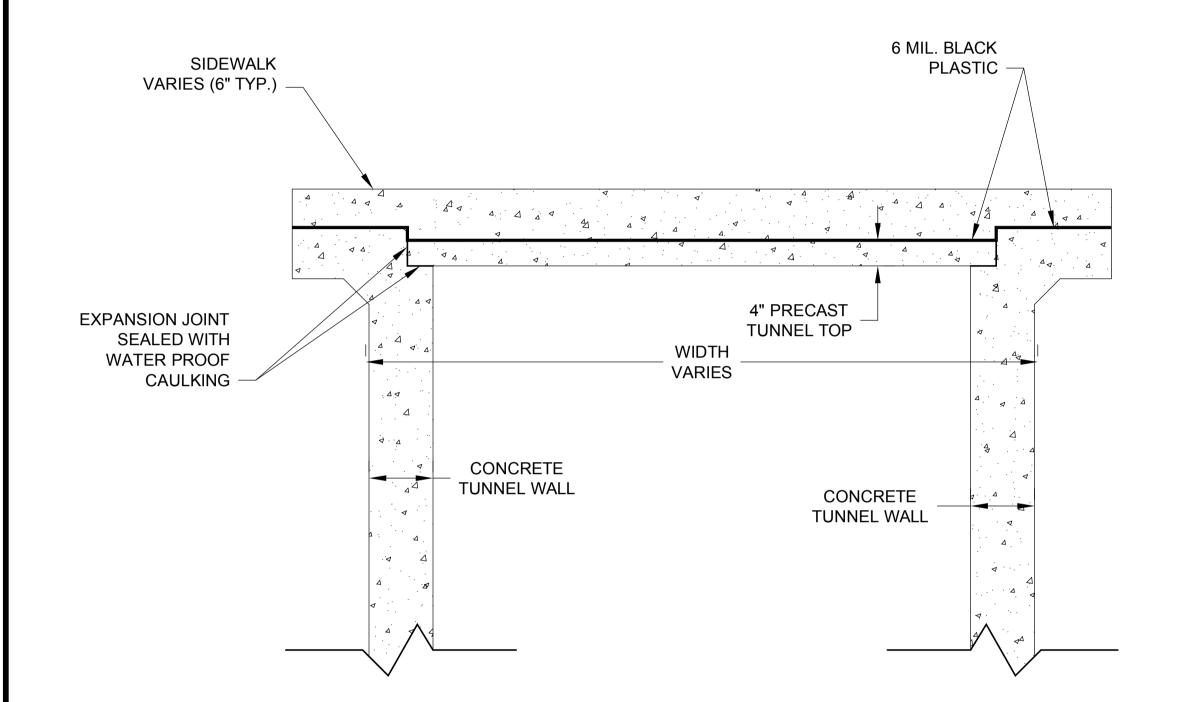
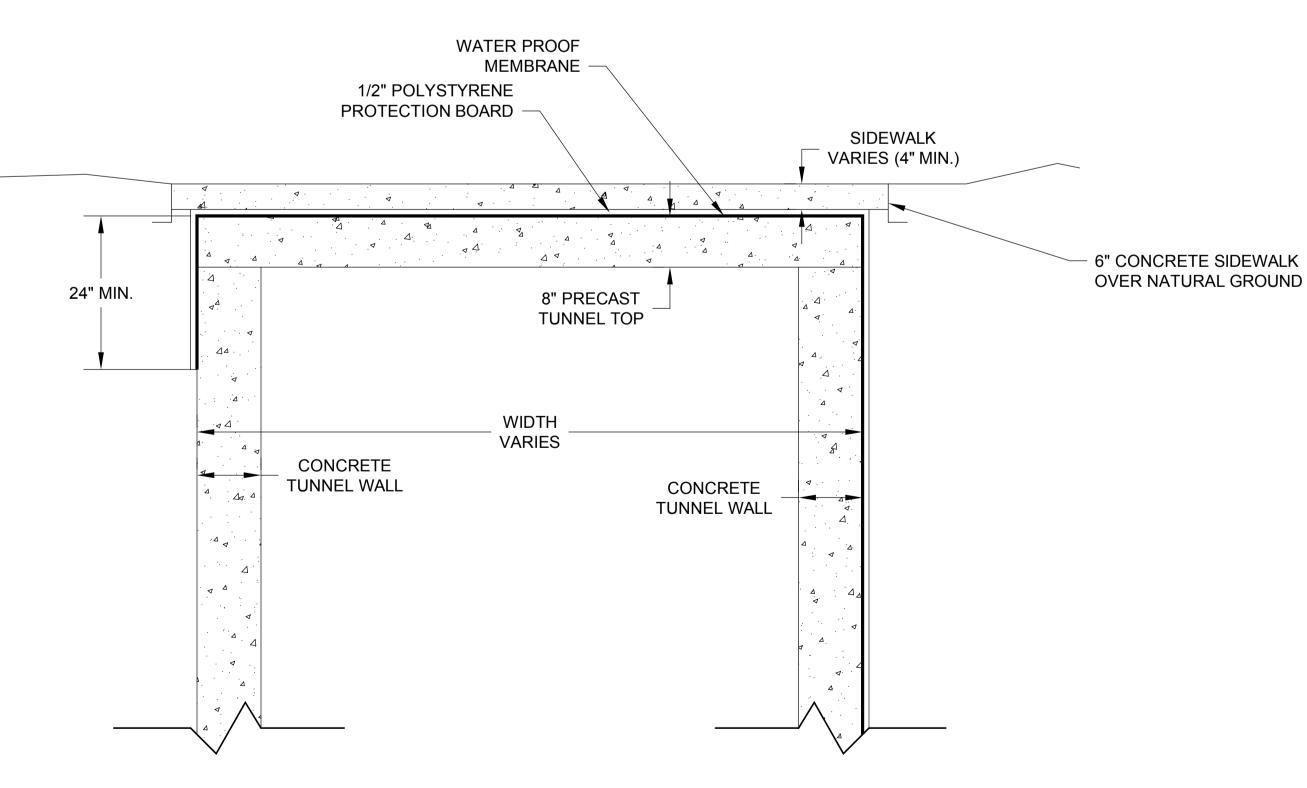
NOTES:

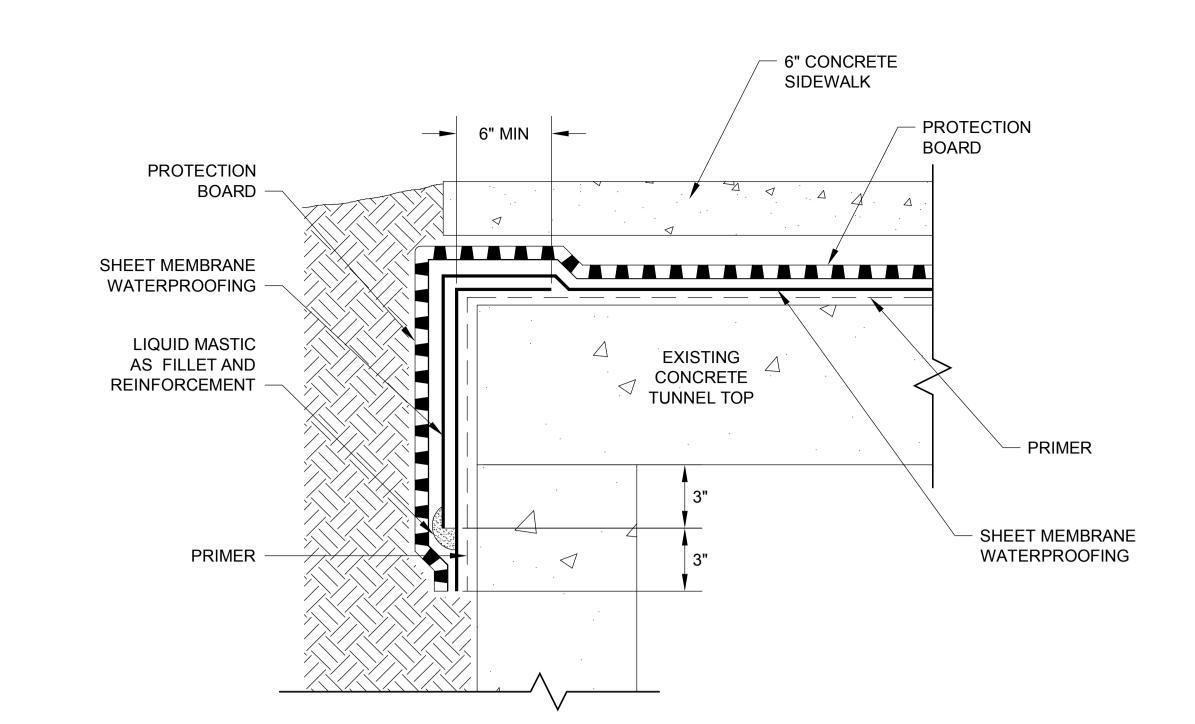
- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING A SITE SURVEY AND VERIFYING ALL EXISTING CONDITIONS.
- 2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES WHETHER SHOWN OR NOT SHOWN ON THIS PLAN, PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THEM FROM DAMAGE. CALL GOPHER STATE ONE CALL: 1-800-252-1166.
- 3. EXISTING CONCRETE WALK/PAVEMENT (THICKNESS VARIES) HAS BEEN CONSTRUCTED OVER THE TOP OF EXISTING STEAM TUNNELS THROUGHOUT PARTS OF THE VA MEDICAL CENTER CAMPUS. EXISTING TUNNEL SECTIONS AND CONSTRUCTION VARIES. THE SECTIONS SHOWN REPRESENT EXISTING TYPICAL SECTIONS FOR SEGMENT "A" (SEE SHEET C104) AND SEGMENT "B (SEE SHEET C105). EXISTING SECTIONS IN THE FIELD MAY VARY FROM THOSE SHOWN. OTHER SEGMENTS EXIST.
- WHERE EXISTING STEAM TUNNEL SEGMENT "A" RUNS ADJACENT TO THE BITUMINOUS ROADWAY, SAWCUT BITUMINOUS PAVEMENT AS NECESSARY. TWO-WAY TRAFFIC (10 FOOT LANES) MUST BE MAINTAINED ON THE ROADWAY AT ALL TIMES. CONTRACTOR TO PROVIDE ALL NECESSARY TRAFFIC CONTROL. PATCH BITUMINOUS PAVEMENT.
- 5. REMOVAL OF EXISTING CONCRETE WALK/PAVEMENT OVER THE EXISTING STEAM TUNNELS MUST BE DONE WITHOUT DISTURBING THE EXISTING TUNNELS OR THE PIPING AND EQUIPMENT THEY CONTAIN. IMPACT REMOVAL TECHNIQUES, SUCH AS JACKHAMMERING, WILL NOT BE ALLOWED.
- 6. SHEET MEMBRANE WATERPROOFING IS TO BE INSTALLED OVER THE EXISTING STEAM TUNNELS IN AREAS WHERE THE EXISTING CONCRETE WALK/PAVMENT IS TO BE REMOVED AND REPLACED.
- 7. SHEET MEMBRANE WATERPROOFING IS TO EXTEND DOWN THE SIDES OF THE TUNNEL PAST THE TUNNEL TOP.
- 8. INSTALLATION OF SHEET MEMBRANE WATERPROOFING SHALL CONSIST OF PREPARATION OF EXISTING CONCRETE SURFACES, SEALING OF CRACKS AND JOINTS, AND APPLICATION OF SHEET MEMBRANE WATERPROOFING.



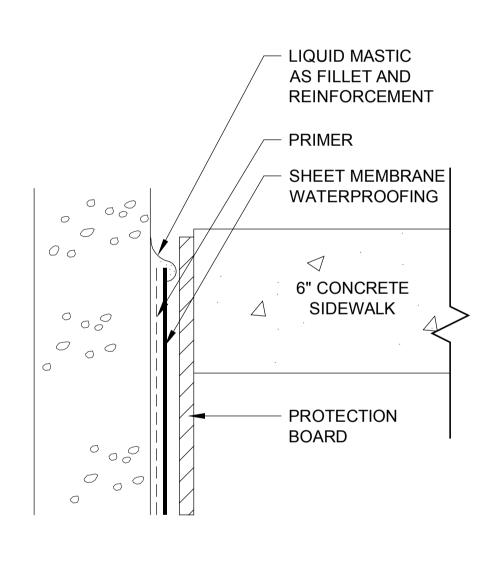
EXISTING STEAM TUNNEL - SEGMENT "A" (SECTION)



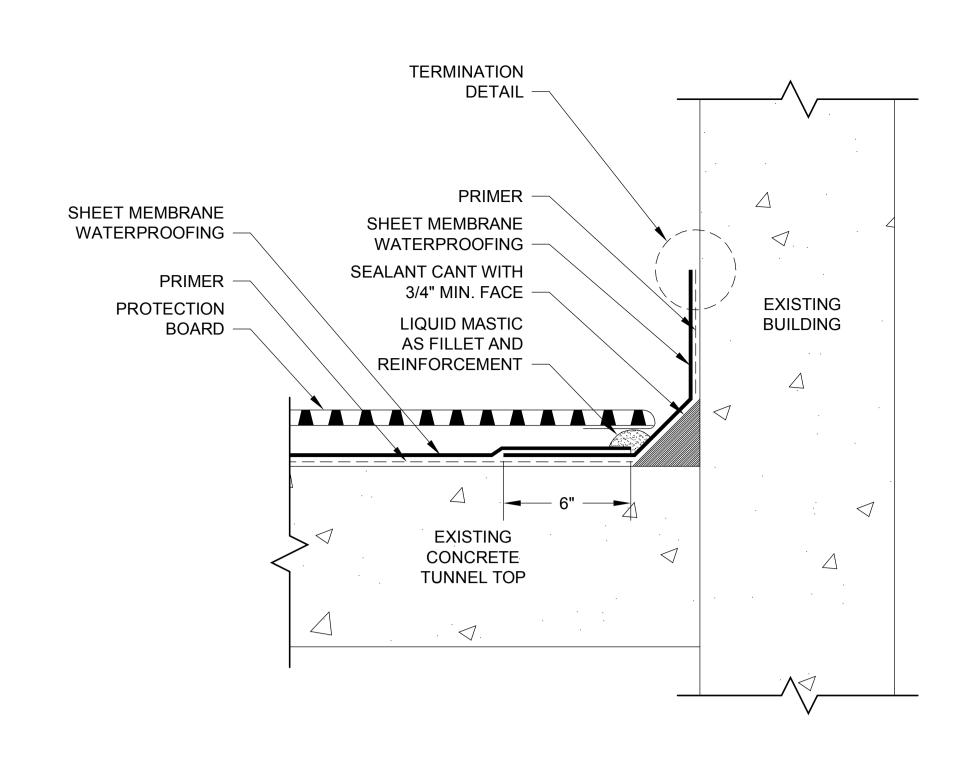
EXISTING STEAM TUNNEL - SEGMENT "B" (SECTION)



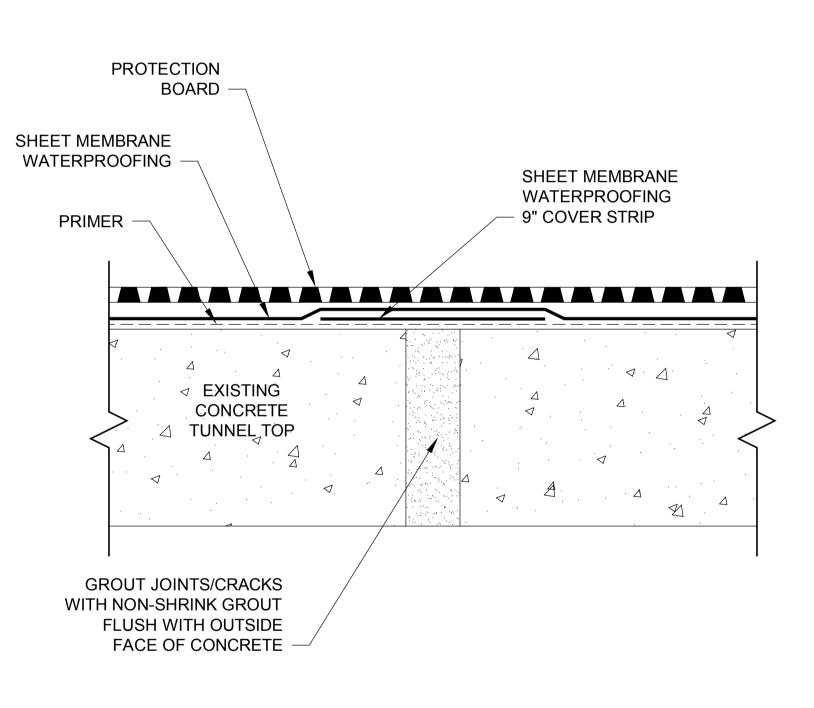
PROPOSED WATERPROOFING TUNNEL OUTSIDE CORNER



TERMINATION DETAIL



PROPOSED WATERPROOFING TUNNEL AT BUILDING WALL



NON-MOVING
JOINT/CRACK

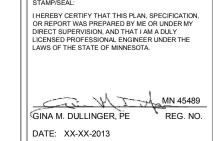
100% CD'S - FOR CONSTRUCTION



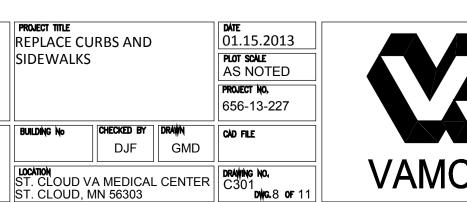
2 3 5

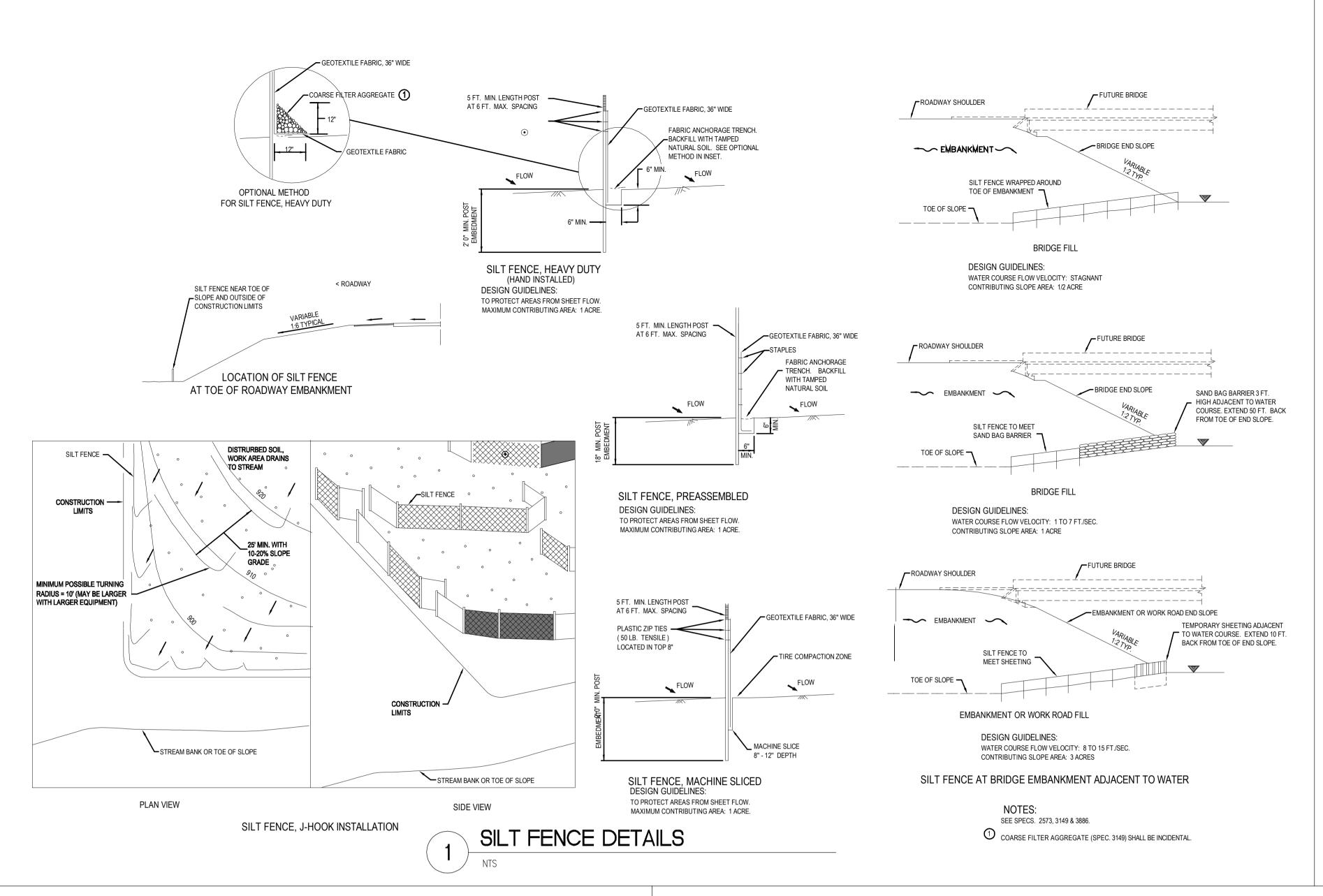


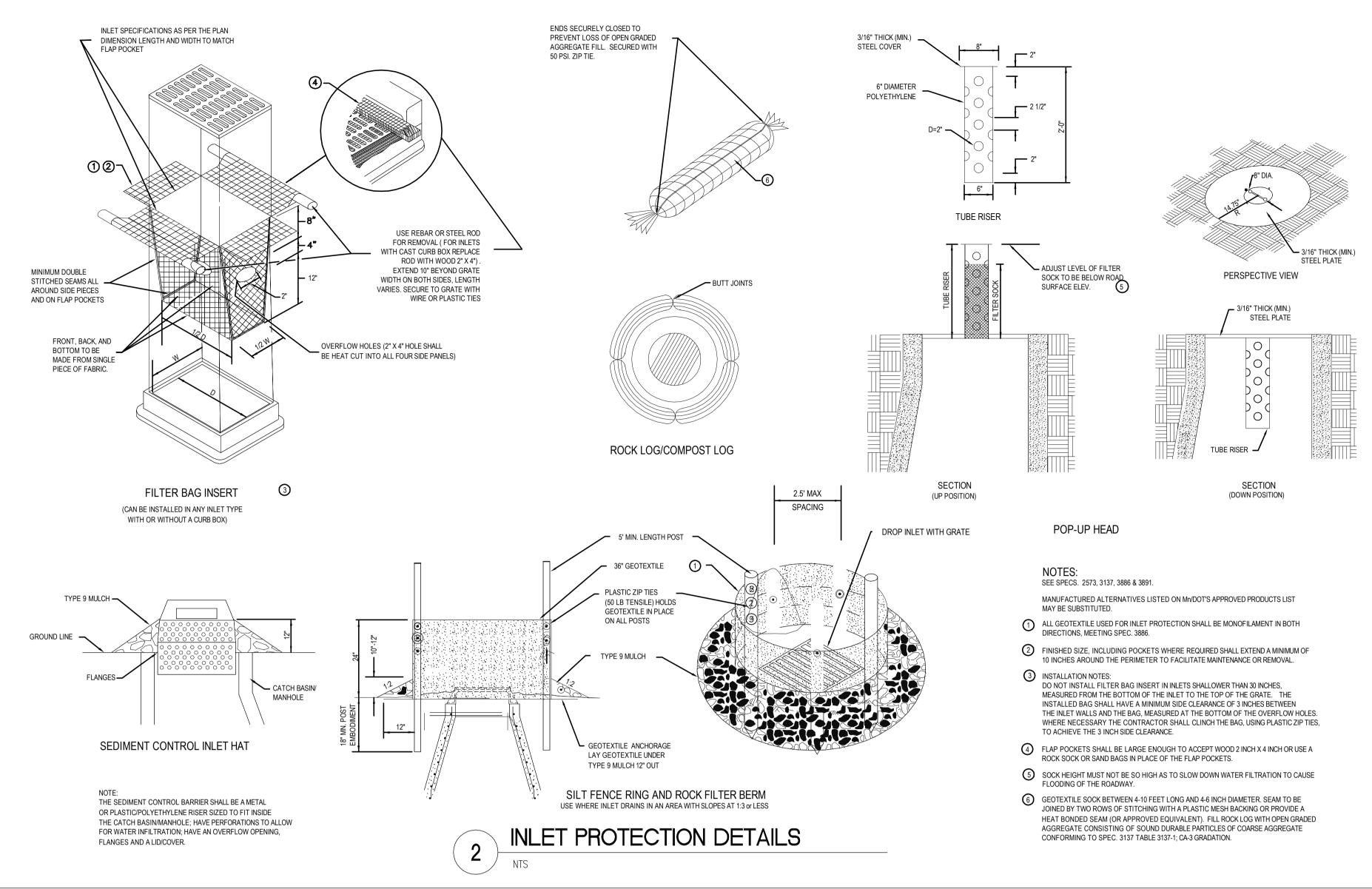
6 7 8

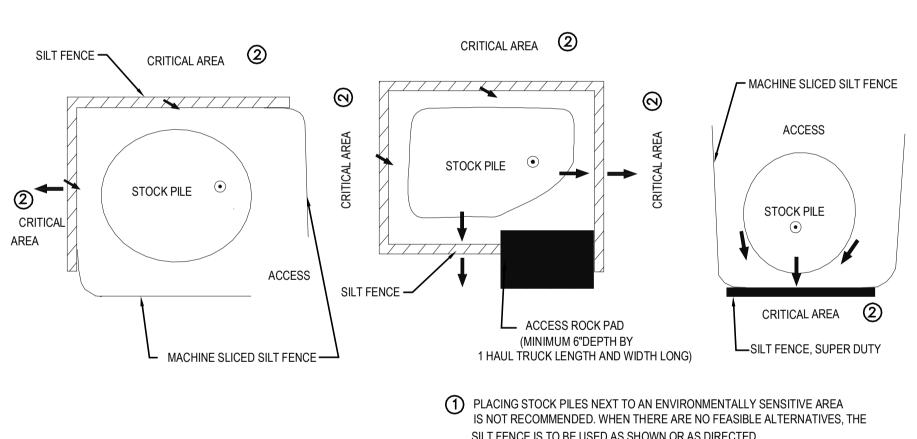


NG THE DEWALK IMPROVEMENTS	REPLACE CURBS A
VER EXISTING STEAM JNNELS	
ROYED: PROJECT DIRECTOR DÂTE:	BUILDING No CHECKE
	D
	LOCATION





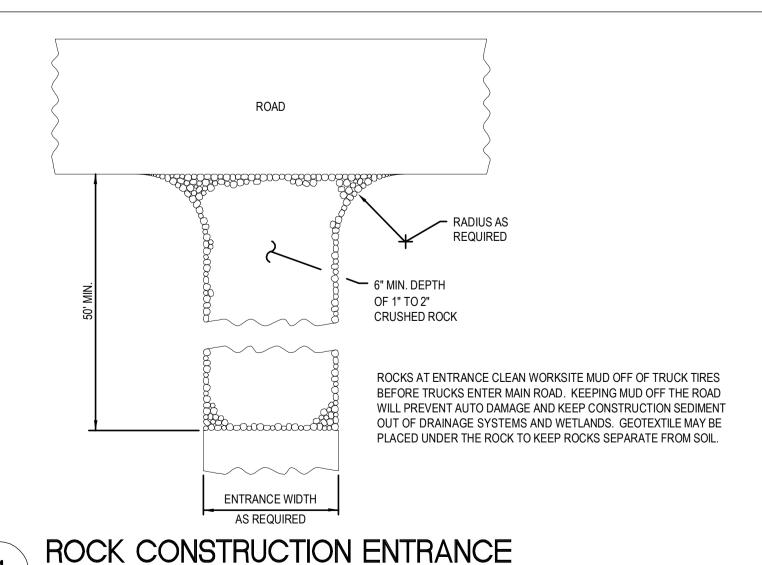




SILT FENCE IS TO BE USED AS SHOWN OR AS DIRECTED

(2) CRITICAL AREAS INCLUDE WETLANDS, JUDICIAL DITCHES, STREAMS, WATER

BODIES, AND OTHER AREAS REQUIRING PROTECTION. STOCK PILE CONTAINMENT



EROSION NOTES

- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE CODES AND BE CONSTRUCTED AS SUCH. WHERE A CONFLICT EXISTS BETWEEN LOCAL JURISDICTIONS STANDARD SPECIFICATIONS AND DESIGN TREE ENGINEERING STANDARD SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY.
- 2. THE CONTRACTOR IS CAUTIONED THAT THE LOCATIONS AND/OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE VA. THE SUBSURFACE UTILITY INFORMATION SHOWN IS LEVEL D. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES. THE LOCATIONS OF UTILITIES SHALL BE OBTAINED BY CALLING MINNESOTA GOPHER STATE ONE CALL AND THE VA.
- THE DESIGN SHOWN IS BASED UPON THE ENGINEERS UNDERSTANDING OF THE EXISTING CONDITIONS. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY, IT WILL BE CONTRACTORS RESPONSIBILITY AND EXPENSE TO HAVE TOPOGRAPHIC SURVEY DONE BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO OWNER FOR REVIEW.
- THE CONTRACTORS SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES. CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES THAT MAY OCCUR.
- THE SWPPP IS COMPRISED OF THE EROSION AND SEDIMENT CONTROL PLAN, THE STANDARD DETAILS, THE SWPPP NARRATIVE, PLUS THE PERMIT AND ALL RELATED DOCUMENTS.
- THE CONTRACTOR SHALL ASSIST THE VA IN COMPLETING AND SUBMITTING THE APPLICATION FOR THE MPCA GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE SWPPP AND NPDES PERMIT AND BECOME FAMILIAR WITH THEIR CONTENTS. THE SWPPP AND ALL OTHER RELATED DOCUMENTS MUST BE KEPT ON SITE DURING CONSTRUCTION. CONTRACTOR MUST PROVIDE CERTIFIED PERSONNEL FOR SWPPP RECORDS.
- CONTRACTOR SHALL IMPLEMENT BMP'S AS REQUIRED BY THE SWPPP AND PERMITS THE CONTRACTOR SHALL OVERSEE THE INSPECTION AND MAINTENANCE OF THE BMP'S AND EROSION AND SEDIMENT PREVENTION FROM BEGINNING OF CONSTRUCTION TO COMPLETION OF CONSTRUCTION, AND NOTICE OF COMPLETION HAS BEEN FILED WITH THE MPCA BY EITHER THE OWNER OR THE OPERATOR ON THE PERMIT. ADDITIONAL BMP'S AND MAINTENANCE SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- BMP'S SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- ESC PLAN MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- 10. THE CONTRACTOR SHALL MINIMIZE CLEARING AS REQUIRED BY THE GENERAL PERMIT. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED ON THE SITE BEFORE WORK BEGINS.

- 11. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AREA, EMPLOYEE PARKING AREA, AND AREA FOR PORTABLE FACILITIES. NO VEHICLE CLEANING ALLOWED ON SITE.
- 12. NO TRUCK WASHOUT ALLOWED ON SITE.
- 13. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS SHALL BE MAINTAINED ON SITE AND READILY AVAILABLE FOR USE.
- 14. DUST ON THE SITE SHALL BE CONTROLLED.
- 15. SOLID WASTE: CONSTRUCTION WASTE MUST BE DISPOSED OF PROPERLY, AND COMPLY WITH MPCA REQUIREMENTS.
- 16. HAZARDOUS MATERIALS MUST BE PROPERLY STORED IN CONTAINERS, AND PROTECTED FROM ELEMENTS.
- 17. ALL STORM WATER POLLUTION PREVENTION MEASURES ON THIS PLAN, AND IN THE SWPPP, MUST BE INITIATED PRIOR TO ANY SITE WORK.
- 18. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED SHALL BE TEMPORARILY SEEDED. SEEDING WILL BE IN ACCORDANCE WITH MNDOT SPEC. 2575.
- 19. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY ESTABLISHED
- 20. CONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT FROM CONVEYANCES AND FROM TEMPORARY SEDIMENT BASINS.
- 21. ON AND OFF SITE SOIL STOCK PILES AND BORROW AREAS SHALL BE PROTECTED WITH BMP'S.
- 22. TEMPORARY STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT AND EROSION CONTROLS.
- 23. SLOPES SHALL BE LEFT IN A ROUGH CONDITION TO HELP ELIMINATE RILLING.
- 24. DUE TO GRADE CHANGES DURING THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE ESC MEASURES TO PREVENT EROSION AND SEDIMENTATION.
- 25. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH DAY. THIS INCLUDES BACKFILLING OF TRENCHES AND PLACEMENT OF GRAVEL OR BITUMINOUS.
- 26. NO STOCKPILE OF MATERIALS NOT TO BE USED ON SITE.
- 27. ALL EXCESS MATERIALS TO BE REMOVED FROM SITE DAILY.
- 28. NO CONCRETE WASHOUT ALLOWED ON VA PROPERTY TRUCKS TO BE TAKEN OFF

MAINTENANCE

ALL MEASURES STATED ON THIS ESC PLAN, AND IN THE SWPPP SHALL BE MAINTAINED UNTIL NO LONGER REQUIRED. ALL ESC MEASURES SHALL BE CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- 1. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION MUST BE PROTECTED BY BMP'S UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED.
- 2. ALL SODDED AREAS SHALL BE CHECKED TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE WATERED AND FERTILIZED AS NEEDED.
- 3. SILT FENCE SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION BY THE CONTRACTOR IF DAMAGED. SEDIMENT MUST BE REMOVED WHEN IT REACHES ONE THIRD THE HEIGHT OF THE SILT FENCE. THIS WORK MUST BE DONE WITHIN 24 HOURS
- 4. VEHICLE TRACKING OF SEDIMENT FROM THE CONSTRUCTION SITE MUST BE MINIMIZED BY BMP'S. STREET SWEEPING MUST BE USED IF BMP'S ARE NOT ADEQUATE TO PREVENT TRACKING. TRACED SEDIMENT MUST BE REMOVED WITHIN 24 HOURS
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION.

SITE STAGING

- CONTRACTOR TO PROVIDE A FINALIZED PLAN FOR VA APPROVAL SHOWING PARKING, STAGING, CONSTRUCTION FENCES, AND STORAGE AREAS PRIOR TO ANY WORK TAKING PLACE.
- 2. CONTRACTOR PARKING, STORAGE, AND INITIAL STAGING CAN BE LOCATED NORTH OF BUILDING 48 AS SHOWN ON THE DRAWINGS.
- MAINTAIN STAFF AND PATIENT ACCESS TO ALL BUILDINGS.
- 4. WORK TO BE DONE IN STREETS MUST BE APPROVED BY VA STAFF. WORK MUST BE DONE BETWEEN THE HOURS OF 6:00 PM AND 6:00 AM. ROADS MUST BE OPENED TO TRAFFIC BY 6:00 AM THE FOLLOWING DAY. CONTRACTOR MUST PROVIDE A TRAFFIC

CONTROL AND DETOUR PLAN TO VA. ALL EMERGENCY SERVICES MUST BE NOTIFIED.

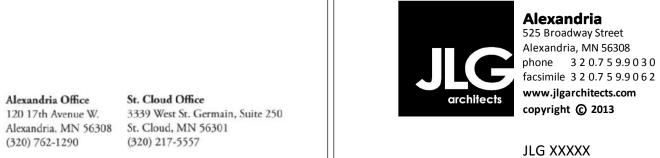
100% CD'S - FOR CONSTRUCTION

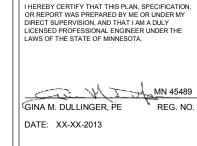
AS NOTED

656-13-227



2 5 7





PROJECT TITLE
REPLACE CURBS AND EROSION CONTROL/SWPPP DJF GMD LOCATION ST. CLOUD VA MEDICAL CENTER ST. CLOUD, MN 56303

DING.9 OF 11



